

CFR working paper No. 13-10

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mutual fund industry**

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Managerial Multitasking in the Mutual Fund Industry*

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Abstract

Managerial multitasking has become a common practice in the mutual fund industry. Although multitasking may have certain benefits for fund companies and portfolio managers, these arrangements have significant drawbacks for fund investors. We find that multitasking is associated with worse fund performance. Moreover, we find significant performance deterioration when single-tasking managers begin multitasking. We further provide evidence that multitasking limits the investment options of the fund managers or reduces the attention they allocate to their funds. Our study prescribes caution when assigning a portfolio manager with a greater workload as doing so adversely affects fund performance and, at some point, the ability of the fund family to attract capital.

Keywords: Multitasking, Fund Performance, Fund Flows, Agency Problems

JEL Classification: G10, G20, G23

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“If you want something done, ask a busy person.” -Benjamin Franklin

1. Introduction

Much effort has been spent trying to uncover factors that affect mutual funds' performance given that the average fund underperforms passive indices net of fees. For instance, it is well-known that more active managers and those who deviate more from their benchmark indices generate higher risk-adjusted performance (Kacperczyk, Sialm, and Zheng 2008; Cremers and Petajisto 2009; Amihud and Goyenko 2013). Despite the positive relation between managerial activeness and performance, fund companies have increasingly tasked portfolio managers with running more than one fund (a phenomenon we term “multitasking”) even though doing so would seemingly reduce the amount of time and attention these managers can dedicate to each individual fund. Indeed, several studies have associated multitasking with reductions in productivity and performance in experimental or field settings (Pashler 1994; Aral et al. 2012; Buser and Peter 2012; Junco 2012; KC 2014). In this study, we explore the relation between multitasking and performance for mutual fund managers.

To begin, we document that managerial multitasking has become significantly more common over time. The percentage of managers who multitask has increased from 33% in 1990 to 50% in 2018. Next, we explore potential explanations for why fund companies have managers multitask. We find that managers tasked with multitasking have higher past performance, have attracted greater fund flows, and run larger funds. These results suggest these arrangements may help fund companies i) promote and retain talented managers as portfolio manager compensation is increasing in the level of assets a portfolio manager is assigned (Ma, Tang, and Gomez 2019; Ibert et al. 2018), ii) allocate capital to their most productive and talented managers (Berk, van Binsbergen, and Liu 2017), or iii) mitigate decreasing returns to scale their managers face when running large pools of capital in a given style.

Although multitasking may have certain benefits for fund companies and portfolio managers, these arrangements have significant drawbacks for fund investors. Our main finding is that multitasking is associated with worse fund performance. Funds run by managers who multitask earn 0.028 to 0.036% lower monthly risk-adjusted returns than funds led by portfolio managers responsible for just a single fund. Moreover, we find significant performance deterioration for multitasking managers when we compare their performance after they are tasked with managing additional funds to their own performance before these arrangements commenced. Multitasking managers' risk-adjusted performance decreases by 0.099 to 0.111% per month in the 36-month period after they begin managing additional funds.

Our next set of analyses examines the channel by which multitasking adversely affects performance. Extant research has shown that multitasking reduces the amount of attention agents can allocate to any individual task (Hallowell 2005; Mayer and Moreno 2003; Pashler 1994). Consistent with this hypothesis, we find that performance deteriorates even more when managers are responsible for greater numbers of funds or investment styles. Additionally, we find that multitasking managers have lower active share (Cremers and Petajisto 2009) and $1 - R^2$ (Amihud and Goyenko 2013) relative to funds run by managers who do not multitask. These relations provide further evidence that multitasking reduces the effort and attention managers can allocate to their funds. We find that funds with limited investment options, such as small-cap funds and sector funds, suffer performance deterioration the most, suggesting that allocating additional capital to managers most subject to investment constraints and demand for managerial attention are also a possible driver for the negative relation between multitasking and fund performance.

Finally, we examine why fund companies assign managers to multitask. We find that although multitasking appears to negatively affect the performance and flows for these managers'

original funds, the managers who multitask attract higher levels of investor capital in aggregate. These results suggest that while investors in the managers' original funds anticipate a performance decline once these managers begin multitasking, some investors also expect that these talented managers will improve the performance of the additional funds to which the managers are assigned and allocate more capital to them accordingly.

Our results present several policy implications for money management firms. First, our results suggest that money management firms can leverage the talents of their most productive managers, a scarce resource, to maximize their revenue by having these managers multitask. Second, we find that multitasking managers come from larger funds and are tasked with running funds in different styles in most cases. These findings suggest that managerial multitasking may be one way that fund companies help mitigate diseconomies of scale in the multitasking managers' original funds while diversifying their product offerings. Third, we posit that fund companies may be assigning multiple funds to their top performing managers as a way of retaining them as portfolio manager compensation is increasing with the assets they manage. Finally, our results indicate that fund companies should exercise caution in burdening these managers with additional responsibilities as, beyond a certain point, their performance could decline to a level that investors find unacceptable which could result in capital outflows for the money management firm.

2. Data and Summary Statistics

The primary data source for our study is the survivorship-bias free Morningstar Direct Mutual Fund (MDMF) database. This database covers U.S. open-end mutual funds and provides information about fund names, manager names, returns, total net assets, expense ratios, turnover ratios, investment styles, and other fund characteristics. We rely primarily on the Morningstar

database as Massa, Reuter, and Zitzewitz (2010) show that it contains the most accurate information on portfolio managers. Our sample includes all actively managed funds with non-anonymous managers. For mutual funds with multiple share classes, we aggregate all observations at the fund level using the unique fund identifier provided by the MDMF database. To mitigate the incubation bias documented in Evans (2010), we exclude the first three years' history for each of our sample funds when conducting our empirical analysis. This yields a final sample of 15,833 portfolio managers from 10,325 mutual funds, covering 995,435 fund-month observations between 1990 and 2018.

When fund managers begin multitasking, they usually take on one more fund in addition to the funds they originally managed. In 73% of these cases, the fund manager acquires an existing fund and the remaining 27% of managers are tasked with a new fund. About 46% of these additional funds have the same investment style as the manager's original fund, and the remaining 54% funds are with a different investment style from the incumbent funds. The fact that managers are tasked with a fund in a different investment style in a majority of cases suggests that fund companies are also wary of diseconomies of scale and do not want to simply allocate more capital to the managers in their present funds.

3. Empirical Results

3.1. Determinants of Managerial Multitasking

In this section, we explore the reasons why fund companies have certain managers multitask and the impact these arrangements have on funds beyond performance. One potential explanation is that mutual fund companies are concerned about losing their best managers to outside opportunities such as hedge funds (Deuskar, Pollet, and Wang 2011; Kostovetsky 2017)

and give such managers more funds to manage as a form of promotion. Studies by Ma, Tang, and Gomez (2019) and Ibert et al. (2018) show that fund manager compensation is increasing in assets under management so providing a manager with more funds to manage would also lead to higher compensation. Another possibility is that fund companies task certain managers with running multiple funds as a way of efficiently allocating capital to their most productive managers. Both the retention and efficient allocation hypotheses predict that managers with higher past performance are more likely to be tasked with running multiple funds. Lastly, it is possible that managers who run larger funds may be given new funds to manage in different investment styles to mitigate concerns that these managers may begin to face diseconomies of scale in their current funds while diversifying the investment objectives of fund companies' product offerings.

To test these predictions, we conduct univariate comparisons of the managers selected to multitask versus those managers who continue to manage a single fund. The results are presented in Table 2. The results are supportive of our predictions. Managers chosen to multitask generate 0.095% and 0.048% higher CAPM and four-factor monthly alphas, respectively. These managers also attract 0.406% higher net flows per month than those managers not selected to multitask. Finally, managers selected to multitask also run funds that are significantly larger and work for larger fund families than those of their counterparts. Combined, these univariate comparisons suggest that multitasking managers are not chosen at random but are instead chosen because they are more productive than their counterparts or more likely to face to decreasing returns to scale in their current funds.

3.2. How Does Multitasking Affect Fund Performance?

In this section, we explore the relation between managerial multitasking and fund performance. We begin our analysis by conducting pooled panel regressions and then engage in analyses that help mitigate concerns that our results are driven by selection or mean reversion, though we acknowledge that we cannot perfectly eliminate these concerns.

3.2.1. Main Result

Our first set of tests compares the monthly returns of funds led by multitasking managers to the returns of funds led by managers who run just one fund. We construct an indicator variable, *Multitasking*, that is equal to 1 if any of fund i 's managers multitask in month $t - 1$, and 0 otherwise. We then estimate regressions of fund i 's monthly risk adjusted return in month t on various control variables from month $t - 1$. These control variables include past performance, the log of fund size, expense ratio, turnover ratio, an indicator variable equal to 1 for team-managed funds, the log of the average manager tenure, and the log of fund i 's family's assets in month $t - 1$. We also include the total assets under management for each manager as an additional control for manager workload. The regressions include year-month and investment style fixed effects. We add fund fixed effects to control for time-invariant, unobservable fund characteristic that explains both the decision to begin multitasking and the negative effect of the multitasking.

We present the results of these regressions in Table 3. The results indicate that multitasking has a negative and statistically significant effect on fund performance. The coefficients on *Multitasking* range from -0.028 to -0.036 , which mean that funds run by multitasking managers generate between 0.028% and 0.036% lower returns each month relative to funds led by single-tasking managers. These effects equate to 0.336 to 0.432% lower returns on an annualized basis. The effect multitasking has on fund performance is incremental to the effects of fund size, expense

ratio, turnover ratio, and the other control variables which we note have the same signs as are commonly found in the prior literature.

3.2.2. *Changes in Performance after Switch to Multitasking*

Although the results from our main regressions suggest that multitasking managers perform worse than single-tasking managers, they do not necessarily establish that managers perform worse once they begin multitasking. For this reason, we estimate time-series regressions using only the sample of managers who begin multitasking during our sample period. Specifically, we compare the risk-adjusted performance of each manager 36-months before and after she begins multitasking. We present the results of these regressions in Table 4.

We continue to find that there is a negative relation between fund performance and multitasking. In fact, the coefficients on *Multitasking* are significantly larger when we compare the multitasking managers' performance to his own performance prior to multitasking. The coefficients on *Multitasking* range from -0.099 to -0.111 which imply that funds earn between 1.188% and 1.332% lower annual returns after their managers are tasked with managing multiple funds. Combined, the results in Tables 3 and 4 provide strong evidence that tasking a manager with multiple funds adversely affects their ability to generate high returns.¹

3.2.3. *Matched Sample Analysis*

One potential concern regarding the above findings is that fund families assign multiple funds to the managers who have performed well in the past. To the extent that their good

¹ Following a referee's suggestion, we repeat our analyses in Tables 3 and 4 at the manager level instead of fund level. We aggregate the total assets under management of the managers, and equal weight the performance, turnover ratio, expense ratio and other fund-characteristics at the fund level. We continue to find a negative relation between managerial multitasking and fund performance.

performance in the past was driven by luck and mean reverts in the future, we would observe the same patterns in the data.

To address the concern of mean reversion, we conduct matched-sample analyses by investigating the change in the risk-adjusted performance of a group funds that share similar characteristics with the treated funds except that their managers are not involved in multitasking. Specifically, we match each multitasking manager with a single-tasking manager based on their 36-month performance (i.e., *CAPM Alpha* and *Four-factor Alpha*) prior to the treatment fund's manager(s) begin multitasking. For each matched pair, we then estimate the same multivariate regressions used in Table 4 for both the treated and matched samples and compare the coefficients on *After Switch* using *F*-tests. We report our findings in Table 5. We find the coefficients on *After Switch* for the control samples of funds are uniformly insignificant at conventional levels. Moreover, the difference in *After Switch* for the treatment and control funds are uniformly negative, economically large, and highly statistically significant. Specifically, the funds whose managers begin multitasking experience between 0.058% and 0.101% larger decreases in performance per month after they begin multitasking. These findings help to mitigate concerns that our earlier results are driven by the alternative explanations of mean reversion in fund performance, though we continue to exercise caution in describing the relation between multitasking and fund performance as purely causal.

3.3. *Economic Channel*

In this section, we turn our attention to uncovering one channel through which multitasking adversely affects fund performance. There are multiple explanations for why multitasking managers may have lower future performance. One possibility is psychological in nature. That is,

multitasking may reduce the attention that managers can allocate to each of the individual funds he or she is assigned. The psychology literature documents similar effects in other settings (Hallowell 2005; Mayer and Moreno 2003; Pashler 1994). A second possibility is that managers tasked with managing multiple funds in less liquid investment styles (e.g., small- and micro-cap funds, sector funds) may simply have more limited investment options and thus may more quickly experience investment constraints. We examine each hypothesis below while noting that they are not mutually exclusive.

3.3.1 Attention

In this section, we examine the possibility that reduced attention helps explain the negative relation between multitasking and fund performance. This hypothesis predicts that when managers are tasked with i) more funds or ii) more unique investment styles, their performance will suffer more. We examine this possibility below.

To do so, we re-estimate our main regression specification but replace the indicator variable, *Multitasking*, with two different continuous variables. The first, *Number of Funds*, is equal to the number of funds a manager is tasked with in month $t - 1$. The second variable, *Number of Styles*, is equal to the number of unique investment styles a manager is tasked with in month $t - 1$. If a fund is team-managed, we take the average of these manager-level variables. We take the logarithm of the two variables to mitigate the effect of outliers. To capture the incremental effect for each additional fund and/or investment style on dividing managers' attention, we only include those funds where at least one manager multitasks. We present the results of these regressions in Table 6.

Consistent with our hypothesis, we find that performance is worse as managers are tasked with more funds or more unique investment styles. These results provide support for our hypothesis that multitasking reduces a manager's ability to focus on any individual fund. Combined, these results suggest that making managers busier exacerbates the effect of multitasking.²

Next, we examine one mechanism through which fund performance deteriorates due to a decrease in attention. We predict that measures of activeness or effort will decrease after a manager begins multitasking. We follow Cremers and Petajisto (2009) and Amihud and Goyenko (2013) to calculate *Active Share* and $1 - R^2$ for each fund in our sample. $1 - R^2$ is calculated as one minus the R^2 of a regression of the fund's returns on the four factors of Carhart (1997). We re-estimate our main regression specification but substitute these measures of effort or activeness as our dependent variables and present the results in Table 7.

We find evidence consistent with our hypothesis for both measures. Specifically, managers who run multiple funds have lower *Active Share* and $1 - R^2$ as indicated by the negative coefficients on *Multitasking* dummy. The results in this section provide evidence that multitasking decreases the amount of attention and effort that fund managers can allocate to any individual fund which adversely affects performance.

3.3.2 Limited Investment Options

² Following a referee's suggestion, in untabulated results, we examine if "task variety" rather than the number of funds per se was driving our relation. We include both *Number of Funds* and *Number of Styles* in the specification in Table 6. We find that the coefficient on *Number of Styles* is insignificant while the coefficient on *Number of Funds* remains negative and highly statistically significant. This result suggests that multitasking itself, rather than task variety, is the primary driver of the negative relation.

Another possible driver of the negative relation between multitasking and fund performance is that multitasking managers' investment options become limited as his assets under management grow. We expect that such diseconomies of scale matter the most for small- and micro-cap stock funds and sector funds.

To test this alternative channel, we separate our sample into three groups: 1) small- and micro-cap stock funds, 2) sector funds, and 3) all other funds. We re-estimate the regressions of Table 4 using these subsamples. As shown in Table 8, the coefficients on the indicator variable *After Switch* is 2-3 times larger for small-cap and sector funds relative to the remaining funds, suggesting that these funds suffer the most because higher returns are harder to achieve with growth in the assets under management.

As mentioned earlier, the attention and limited investment options hypotheses are not mutually exclusive. In fact, another interpretation of the results presented in Table 8 is that multitasking managers' performance suffers more when they run small-cap or sector funds precisely because these funds are more research intensive because of limited public information. That is, when managers decrease the attention or effort they allocate to this type of fund, funds' performance suffers more.

3.4. Do Investors Respond to Multitasking Arrangements?

Our final analysis examines whether investors anticipate the effect multitasking has on fund performance and allocate capital accordingly. Although fund companies are tasking better-performing managers with more funds, our analysis thus far clearly indicates that this practice is not optimal for fund investors. We next examine whether fund investors anticipate the deteriorating effect that multitasking has on fund performance and allocate less capital to funds

led by multitasking managers. Specifically, we estimate regressions where the dependent variable is the monthly flow a fund receives in month t and the main variable of interest is *Multitasking*. We control for other determinants of flows including past performance, fund size, and expense ratio, among others.

The results of these regressions are presented in Panel A of Table 9. The main coefficient of interest, *Multitasking*, is negative, economically large, and highly statistically significant regardless of whether we control for past performance using *CAPM Alpha* or *Four Factor Alpha*. The coefficients on *Multitasking* are -0.227 and -0.239 , meaning that funds whose managers begin multitasking receive between 2.72% and 2.87% lower flows after their managers enter multitasking arrangements.

Given this result, it is reasonable to ask why fund companies would task their managers with running multiple funds. That is, if the funds these managers originally run experience performance declines and losses of investor capital, these arrangements would appear suboptimal for fund companies. To shed light on this issue, we examine the overall flows multitasking managers receive. It is possible that adding these managers to other funds signals to investors that these funds' performance will improve since funds are now being run by a high performing manager. To examine this possibility, we re-estimate the regressions in Panel A of Table 9 instead using overall manager-level flows and performance measures. These results are presented in Panel B of Table 9. In contrast to the results in Panel A, the manager-level regressions indicate that managers who multitask attract higher flows in the period after they begin multitasking. Specifically, the coefficients of 0.589 and 0.598 on *Multitasking* indicate that these managers attract between 7.07% and 7.18% higher flows once they begin multitasking. This result is

presumably driven by these managers being assigned to previously underperforming funds and investors anticipating that the new management team will improve fund performance.

4. Conclusion

In this study, we examine the relation between portfolio manager multitasking and fund performance. We find that multitasking managers generate 0.028% to 0.036% lower returns per month than managers only responsible for a single fund. Fund performance declines in the 36-months after its managers begin multitasking and this performance decline does not appear to be solely due to mean reversion. The channels for this performance deterioration appear to be a reduction in attention and limited investment options for some investment styles. Although multitasking managers' original funds experience lower flows in the months after these arrangements commence, the overall flows to funds run by multitasking manager increase in aggregate which helps explain why fund companies engage in these arrangements.

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Table 1
Summary Statistics

This table reports the summary statistics for the funds in our sample. *CAPM Alpha* is the monthly, out-of-sample alpha based on the Capital Asset Pricing Model. *Four-Factor Alpha* is the monthly, out-of-sample alpha based on the Carhart (1997) four-factor model. *Fund (Family) Size* is a fund's (a family's) total net assets in millions of dollars. *Expense Ratio* is determined by dividing the fund's annual operating expenses by the average dollar value of its assets under management. *Turnover Ratio* is defined as the minimum of sales or purchases divided by the average total monthly net assets of a fund during a year. *Estimated Flows* is constructed as the monthly net growth in fund assets beyond reinvested dividends and fund returns (Sirri and Tufano 1998). *Active Share* is defined as in Cremers and Petajisto (2009) and $1 - R^2$ is constructed as in Amihud and Goyenko (2013). The sample is from January 1990 to December 2018. All variables are winsorized at the 1st and the 99th percentile levels.

Variable	Mean	Median	Std. Deviation	N
CAPM Alpha (monthly, %)	-0.036	0.009	2.076	995,435
Four-Factor Alpha (monthly, %)	-0.098	-0.031	1.901	995,435
Fund Size (millions)	1,080	280	2,200	995,435
Expense Ratio (%)	1.08	1.03	0.46	991,866
Turnover Ratio (%)	85.50	54	103.93	990,545
Estimated Flows (monthly, %)	0.10	-0.35	5.25	995,435
Family Size (millions)	119,000	30,300	249,000	995,435
Active Share	0.851	0.912	0.157	403,073
$1 - R^2$	0.136	0.086	0.152	409,507

Table 2
Which Managers Begin Multitasking?

This table compares the characteristics of the funds whose managers switch from single-tasking to multitasking (i.e., switchers) with those of the funds whose managers continue to manage a single fund (i.e., non-switchers). The differences between the characteristics of the switchers and non-switchers are reported in the last column. Reported fund characteristics include risk-adjusted performance, flows, fund size, and family size, all estimated or measured over a 36-month window prior to the month of the switch. Statistical significance of 1%, 5%, and 10% is indicated by ***, **, and * respectively.

Fund Characteristic	Switchers	Non-switchers	Difference
CAPM Alpha (%)	0.126	0.031	0.095***
Four-Factor Alpha (%)	0.031	-0.017	0.048***
Net Flows (%)	1.065	0.659	0.406***
Fund Size (millions)	1,045.95	896.92	149.03***
Family Size (millions)	75,629	70,551	5,078***

Table 3
Performance and Multitasking

This table examines the effect of multitasking on fund performance using a panel regression approach. The dependent variable is the current month risk-adjusted performance (i.e., *CAPM Alpha* or *Four-factor Alpha*). The key independent variable is *Multitasking*, an indicator variable that equals to 1 if at least one of the fund's managers is responsible for another fund and 0 otherwise. All other variables are defined as in Table 1. The standard errors are clustered by fund family and *t*-statistics are reported in parentheses. Statistical significance of 1%, 5%, and 10% is indicated by ***, **, and * respectively.

	<u>CAPM Alpha</u>		<u>Four-Factor Alpha</u>	
	(1)	(2)	(3)	(4)
Multitasking _{t-1}	-0.028*** (-3.04)	-0.030** (-2.54)	-0.035*** (-4.44)	-0.036*** (-3.65)
Log Fund Size _{t-1}	-0.010*** (-4.70)	-0.123*** (-20.04)	-0.010*** (-4.60)	-0.110*** (-20.49)
Expense Ratio _{t-1}	-0.051*** (-5.55)	-0.017 (-0.65)	-0.052*** (-6.52)	-0.010 (-0.50)
Log Turnover _{t-1}	-0.007** (-2.04)	-0.011* (-1.89)	-0.008** (-2.43)	-0.011* (-1.93)
Team _{t-1}	-0.011 (-1.40)	-0.027** (-2.02)	-0.001 (-0.17)	-0.010 (-0.96)
Log Manager Tenure _{t-1}	0.010*** (2.94)	0.002 (0.50)	0.011*** (3.47)	0.005 (1.18)
Log Manager AUM _{t-1}	-0.002 (-0.50)	-0.011 (-1.37)	0.001 (0.20)	-0.011* (-1.72)
Log Family Size _{t-1}	0.014*** (6.82)	0.002 (0.18)	0.009*** (4.85)	0.011 (1.27)
CAPM Alpha _{t-1}	0.061*** (23.64)	0.049*** (18.56)		
Four-factor Alpha _{t-1}			0.057*** (22.53)	0.045*** (18.31)
Fund FE	N	Y	N	Y
Style FE	Y	Y	Y	Y
Year-month FE	Y	Y	Y	Y
# Obs.	982,335	982,279	982,335	982,279
Adj. R ²	0.112	0.116	0.110	0.114

Table 4
Changes in Fund Performance after Switching to Multitasking

This table reports the changes in the risk-adjusted performance of the managers who switch from single-tasking to multitasking before and after the switch. The main independent variable of interest is *After Switch*, an indicator variable that equals one (zero) if the observation is within the 36-month period after (before) the managers' switch to multitasking. Control variables are the same as in Table 3. For the sake of brevity, we only report the coefficient estimates of the main variables of interest. The standard errors are clustered at the family level. The *t*-statistics are reported in the parentheses. Statistical significance of 1%, 5%, and 10% is indicated by ***, **, and * respectively.

	<u>CAPM Alpha</u>		<u>Four-Factor Alpha</u>	
	(1)	(2)	(3)	(4)
After Switch	-0.111*** (-5.62)	-0.110*** (-5.45)	-0.101*** (-5.52)	-0.099*** (-5.69)
Controls	N	Y	N	Y
Style FE	Y	Y	Y	Y
Year-month FE	Y	Y	Y	Y
# Obs.	65,876	65,407	65,876	65,407
Adj. <i>R</i> ²	0.119	0.122	0.108	0.111

Table 5
Changes in Performance for Matched Sample

This table reports the changes in the risk-adjusted performance of a matched sample of funds. We use propensity score matching technique and match each multitasking manager with a single-tasking manager based on their 36-month performance (i.e., *CAPM Alpha* in columns (1) and (2) and *Four-factor Alpha* in (3) and (4)) prior to the treatment fund's manager(s) begin multitasking. For each matched pair, we then estimate the same multivariate regressions used in Table 4 for both treated and matched sample. For the sake of brevity, we only report the coefficient estimates of the main variables of interest. The standard errors are clustered at the family level. The *t*-statistics are reported in the parentheses. Statistical significance of 1%, 5%, and 10% is indicated by ***, **, and * respectively.

	<u>CAPM Alpha</u>		<u>Four-Factor Alpha</u>	
	(1)	(2)	(3)	(4)
<u><i>Regression for Multitasking Funds</i></u>				
After (Multitasking)	-0.113*** (-5.21)	-0.111*** (-5.31)	-0.101*** (-5.30)	-0.103*** (-5.47)
<u><i>Regression for Matched Funds</i></u>				
After (Matched)	-0.033 (-0.95)	-0.053 (-1.56)	-0.005 (-0.18)	-0.002 (-0.08)
Diff. (Multitasking - Matched)	-0.079***	-0.058***	-0.096***	-0.101***
<i>p</i> -value (F-Test of Difference)	0.006	0.006	0.001	0.002
Controls	N	Y	N	Y
Style FE	Y	Y	Y	Y
Year-month FE	Y	Y	Y	Y

Table 6
Does Higher Multitasking Further Deteriorate Performance?

This table further investigate the channels through which multitasking impact fund performance. The sample contains only the funds where at least one manager is multitasking. The main variable of interest is the logarithm of number of funds (*# Funds*) managed by the same manager(s) or the number of investment styles (*# Styles*) managed by the same manager(s). The control variables are the same as in Table 3. For the sake of brevity, we only report the coefficient estimates of the main variables of interest. The standard errors are clustered by fund and *t-statistics* are reported in parentheses. Statistical significance of 1%, 5%, and 10% is indicated by ***, **, and * respectively.

	<u>CAPM Alpha</u>		<u>Four-factor Alpha</u>	
	(1)	(2)	(3)	(4)
Log # Funds _{t-1}	-0.022*** (-3.75)		-0.025*** (-4.41)	
Log # Styles _{t-1}		-0.026*** (-2.72)		-0.022*** (-3.39)
Controls	Y	Y	Y	Y
Style FE	Y	Y	Y	Y
Year-month FE	Y	Y	Y	Y
# Obs.	826,357	826,357	826,357	826,357
Adj. R ²	0.119	0.119	0.120	0.120

Table 7
Does Multitasking Affect Effort?

This table examines whether multitasking managers exhibit lower levels of activeness in managing their portfolio compared to their single-tasking peers. The model specification is the same as in Table 3 except that the dependent variable is *Active Share* (Cremers and Petajisto 2009) in columns (1)–(2), and *I-R²* (Amihud and Goyenko 2013) in columns (3)–(4). For the sake of brevity, we only report the coefficient estimates of the main variables of interest. The standard errors are clustered by family and *t-statistics* are reported in parentheses. Statistical significance of 1%, 5%, and 10% is indicated by ***, **, and * respectively.

	<u>Active Share</u>		<u>1-R²</u>	
	(1)	(2)	(3)	(4)
Multitasking _{t-1}	-0.027*** (-7.32)	-0.016*** (-5.15)	-0.021*** (-3.94)	-0.009** (-2.17)
Controls	N	Y	N	Y
Style FE	Y	Y	Y	Y
Year-month FE	Y	Y	Y	Y
# Obs.	499,948	499,948	409,507	409,507
Adj. R ²	0.511	0.538	0.488	0.507

Table 8
Does Multitasking Limit Investment Options?

This table reports the results of regressions examining the impact of switching to multitasking on fund performance using three subsamples: two samples that suffer the most from limited investment options: small-cap funds and sector funds, and all other funds. The model specification is identical to Table 4. For the sake of brevity, we only report the coefficient estimates of the main variables of interest. The standard errors are clustered at the family level. The *t*-statistics are reported in the parentheses. Statistical significance of 1%, 5%, and 10% is indicated by ***, **, and * respectively.

	<u>Small-cap Funds</u>		<u>Sector Funds</u>		<u>Other Funds</u>	
	(1)	(2)	(3)	(4)	(5)	(6)
After Switch	-0.169*** (-3.33)	-0.170*** (-3.34)	-0.217** (-2.05)	-0.209** (-2.11)	-0.086*** (-4.44)	-0.075*** (-4.11)
Controls	Y	Y	Y	Y	Y	Y
Style FE	Y	Y	Y	Y	Y	Y
Year-month FE	Y	Y	Y	Y	Y	Y
# Obs.	9,280	9,280	5,140	5,140	50,982	50,982
Adj. <i>R</i> ²	0.476	0.150	0.228	0.228	0.151	0.148

Table 9
Multitasking and Fund Flows

This table reports the results of regressions examining the impact of switching to multitasking on the fund flows of the fund the multitasking managers originally run in Panel A and of the total fund flows a manager attracts in Panel B. The main independent variable of interest is an indicator variable, *Switch Multitasking*, that equals one (zero) if the observation is within the 36-month period after (before) the managers' switch to multitasking. Other independent variables are defined in Table 1. In panel B, all control variables are aggregated at the manager level. The standard errors are clustered at the fund level in Panel A and the manager level in Panel B. The *t*-statistics are reported in the parentheses. Statistical significance of 1%, 5%, and 10% is indicated by ***, **, and * respectively.

Panel A: Fund-level Analysis		
	(1)	(2)
After Switch	-0.239** (-2.12)	-0.227** (-2.03)
CAPM Alpha $_{t-12,t-1}$	0.851*** (11.43)	
CAPM Alpha $_{t-12,t-1}^2$	0.029 (0.79)	
Four-Factor Alpha $_{t-12,t-1}$		0.960*** (10.62)
Four-Factor Alpha $_{t-12,t-1}^2$		0.180*** (3.07)
Log Fund Size $_{t-1}$	-0.121** (-2.58)	-0.124*** (-2.63)
Expense Ratio $_{t-1}$	-0.258 (-1.60)	-0.270* (-1.67)
Log Turnover $_{t-1}$	-0.007 (-0.12)	-0.002 (-0.03)
Team $_{t-1}$	-0.081 (-0.59)	-0.093 (-0.69)
Log Managers' Tenure $_{t-1}$	-0.211** (-1.99)	-0.204* (-1.94)
Log Family Size $_{t-1}$	0.030 (0.84)	0.032 (0.90)
Style FE	Y	Y
Year-month FE	Y	Y
# Obs.	51,549	51,549
Adj. R^2	0.037	0.037

Panel B: Manager-level Analysis

	(1)	(2)
After Switch	0.589*** (4.59)	0.598*** (4.64)
CAPM Alpha $t-12,t-1$	1.166*** (10.86)	
CAPM Alpha $t-12,t-1^2$	-0.003 (-0.04)	
Four-Factor Alpha $t-12,t-1$		1.088*** (9.10)
Four-Factor Alpha $t-12,t-1^2$		0.211** (2.05)
Log Manager AUM $t-1$	-0.830*** (-7.70)	-0.844*** (-7.79)
Expense Ratio $t-1$	-0.564* (-1.66)	-0.527 (-1.59)
Log Turnover $t-1$	-0.660*** (-6.07)	-0.695*** (-6.28)
Log Managers' Tenure $t-1$	-1.033*** (-6.32)	-0.997*** (-6.04)
Log Family Size $t-1$	0.237** (2.29)	0.212** (2.03)
Manager FE	Y	Y
Year-month FE	Y	Y
# Obs.	57,261	57,261
Adj. R^2	0.128	0.126



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